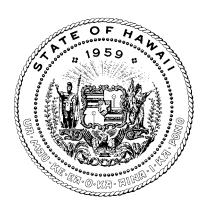
# REPORT TO THE TWENTY-THIRD LEGISLATURE 2006 REGULAR SESSION HAWAII STATEWIDE TRAIL AND ACCESS SYSTEM "NA ALA HELE"



# PREPARED BY:

THE STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
NA ALA HELE TRAIL AND ACCESS PROGRAM

IN RESPONSE TO SECTION 198D-9(7), HAWAII REVISED STATUTES

HONOLULU, HAWAII NOVEMBER 2005

# REPORT TO THE TWENTY-THIRD LEGISLATURE HAWAII STATEWIDE TRAIL AND ACCESS SYSTEM REGULAR SESSION OF 2006

## **PURPOSE**

Chapter 198D, Hawaii Revised Statutes (HRS), which established the Hawaii Trail and Access System, requires the Department of Land and Natural Resources (DLNR) under Section 198D-9(7), HRS, to submit an annual report on activities engaged in this Chapter. This report covers activities and revenue in Fiscal Year (FY) 04-05 and other specific activities from December 2004 to November 2005.

# **INTRODUCTION**

Na Ala Hele (NAH), The Hawaii Statewide Trails and Access Program, was established through legislation in 1988. Section 198D-2, HRS, directs DLNR to plan, develop, acquire land or rights for public use of land, construct, and engage in coordination activities to implement a trail and access system. The program is administered through DLNR's Division of Forestry and Wildlife (DOFAW) Specifically, this report contains the following subjects:

- 1. Program Summary
- 2. Funding Sources
- 3. Recreational Tails and Access Roads
- 4. Ancient and Historic Trails
- 5. Commercial Trail Tour Activity
- 6. Environmental Risk Management
- 7. Advisory Councils
- 8. Statewide Program & Staff Activities

# 1. PROGRAM SUMMARY

# Trails and unpaved access roads are critical resource management and recreational features that serve multiple functions:

- Assisting county search and rescue efforts
- Restoring native flora and fauna and watersheds
- Monitoring and removal of invasive plant and animal species
- Combating and controlling wildland fire as firebreaks and firefighter access ways
- Experiencing and protecting Hawaiian culture through ancient and historic trails
- Recreating by hunting, hiking, bicycling, equestrian riding, off-highway vehicle use
- Diversifying Hawaii's economy via commercial trail and access road tours

# **Positions & Funding**

**There are 11 permanent NAH staff positions:** Program Manager, Historic Trail Abstracter, four Trail and Access Specialists, four ancillary Technicians and one Forestry and Wildlife worker assigned to NAH. These positions are funded through a

combination of LNR 804 General Funds and the State Fuel Tax (SFT) allocation. The portion of SFT transferred to staff salary (3.5 positions) was a result of several years of reoccurring LNR 804 restrictions. There are three budgeted Temporary General Laborers positions funded by a percentage of the Transient Accommodations Tax (TAT) via the Hawaii Tourism Authority (HTA).

NAH Funding Table (excludes LNR 804 General Funds for staff salary)	FY05
NAH % of State Fuel Tax Revenue (3.5 positions)	\$223,200
Federal FY04 Recreational Trails Program Funds	\$625,284
Commercial Trail Tour Activity Revenue	\$112,082
TAT- HTA Allocation (3 positions)	\$100,000
Investment Earnings	\$12,592
<b>Total Funds</b>	\$1,073,158

# **Core Program Activities**

Activities associated with NAH Program administration and management are currently comprised of essentially four distinct, divergent and potentially conflicting subject areas of responsibility:

- Recreational trail and access road management and maintenance
- Ancient and historic trails abstracting, planning and restoration
- Commercial trail tour activity management and monitoring
- Environmental risk assessment and management

This divergent subject matter is particularly challenging to the Hawaii Branch NAH staff – due to the constant necessity to respond to development affecting ancient and historic trails, while also managing and developing recreational trail opportunities.

Reconciling NAH's increased regulatory and management role with the recreational public's perception of a duty to increase multiple use recreational trail opportunities, such as off-road vehicles, is challenging due to land tenure, social conflicts and resource protection issues.

# 2. <u>FUNDING SOURCES</u>

# State Fuel Tax (SFT) Allocation

0.3 percent of the SFT collected under Chapter 243, HRS, is deposited each fiscal year to the Special Land and Development Fund (Section 171-19, HRS) of DLNR. This Fund is codified as S306 in LNR 804 of the DOFAW budget. The allocation is for the purposes of management, maintenance, and development of NAH trails and trail accesses established under Chapter 198D, HRS. Legislation established a limit of \$250,000 that may be allocated to DLNR from SFT revenue. In FY05, \$223,200 was allocated to NAH for expenditure in FY06. 7% (\$22,394) is returned to the Department of Budget and Finance to funds a percentage of central service and administrative expenses. 3.5 NAH

positions are funded by SFT @ \$ 234,184, which meant that this year NAH had to use a portion of carryover funds (\$58,611) to have additional discretionary funds for NAH operations.

# Federal Recreational Trails Program (RTP) Allocation

The Transportation Equity Act for the 21<sup>st</sup> Century (TEA 21) authorizes RTP as a Federal-aid Highway Program and is codified in 23 U.S.C. 206 (RTP replaced the National Recreational Trails Funding Program). DLNR, through NAH, is qualified by the Federal Highways Administration as eligible to receive Hawaii's allocation of RTP funds. Criteria for eligibility mandates that the states have trail councils that include representation by the motorized recreational vehicle constituency, which NAH established at its inception. RTP is a state-administered, federal-aid program, and provides funds to states for trails and trail-related projects that fulfill the goals of a State Comprehensive Outdoor Recreation Plan. In utilizing RTP funds, the state must comply with the Assured Access to Funds requirement: a minimum of 30% of the funding must be used for motorized trail use, 30% for non-motorized trail use, and 40% for diversified (multiple) trail use. The current RTP establishes an 80/20 matching requirement. Due to the limited availability of operating funds from SFT, providing the state RTP match is challenging. DOFAW special and general funded labor, and a portion of the Natural Area Reserve Program funding, constitutes 100% of the state 20% matching requirement. RTP represents the most significant trail-funding source. In 2005, NAH was allocated Hawaii's portion of the Federal FY04 RTP funds: \$625,284

# Transient Accommodation Tax (TAT) Allocation via the Hawaii Tourism Authority

Act 235, SLH 2005, increased TAT allocation to the Tourism Special Fund to 34.2 per cent and repealed the TAT Trust Fund. Act 235, SLH 2005 amended Act 250, SLH 2002, in a significant manner for DLNR: In 2007 a provision goes into effect guaranteeing DLNR \$1,000,000 in TAT revenue (\$900,000 for State Parks and \$1,00,000 to NAH.)

The \$100,000 allocated to NAH will be equally distributed between Kauai, Oahu, and Maui – locations with a high percentage of trails used by visitors, to fund 3 Temporary General Laborer I positions to improve the condition of trails frequented by visitors.

This legislation is significant - it acknowledges the relationship between tourism and its impact on recreational features under DLNR jurisdiction.

There has been a gradual, but steady increase in interest by the visitor industry in ecotourism activities, as trails are an attractive venue for visitors. The market growth over the past several years illustrates the visiting consumer's increased interest in hiking. There are very compelling reasons to use TAT funds on improving the quality of maintenance on specific trails:

- Improved maintenance enhances both visitor and resident safety and facilitates ease of hiking.
- Vegetation trimming in a manner that favors distribution of native plant species along with trail surface repairs, such as the installation of boardwalks and/or applying gravel in poorly drained or habitually wet trail sections, or the installation of amenities such as benches and interpretive signage, improves aesthetic quality of the trail experience.

 Reducing the quantity of non-native plant species and amount of soil erosion along a trail corridor is a natural resource management goal that has direct ecotourism market applications.

# 3. RECREATIONAL TRAILS AND ACCESS ROADS

Recreational trail and access road development and management activities includes maintaining the conditions of all appropriate public trails and access roads to specific management standards and specifications, respond to the ancillary natural and cultural resource management issues associated with trail and access road cooridoors, and manage multiple public and commercial recreational activities. This includes efforts to resolve specific public access disputes and initiate planning and development efforts for trails or accesses that may be suitable for inclusion into NAH, comment on development that may affect trails and accesses, or provide NAH technical or developmental support to other organizations or agencies.

# **Physical Management**

The following activity is necessary for trail/access road and ancillary resource management and to insure public safety. This activity is in response to erosion and trail deterioration associated with public use, combined with precipitation and the need for the constant removal and trimming of vegetation along affected trail and road corridors. The management specifications are in the Trail Design Guidelines of the 1991 NAH Program Plan. Physical management consists of the following activities:

- Grading: Trail or access road surface improvements
- **Brushing:** Cutting back brush along trail and road corridors to specific dimensions
- **Tree removal:** Removing blow downs or other tree related impediments
- Water diversion: Installing or repairing soil retention steps swales, water bars, culverts, etc. to drain precipitation and retain soil along trail and road corridors
- **Hardscaping:** Installing gravel, geotextiles, rocks, rock boxes, or other types of materials along trail and access road corridors subject to high use or precipitation
- **Boardwalk installation or repair**: Boardwalks may be installed in excessively boggy and sensitive environments subject to high use
- **Sign installation or maintenance**: Directional or interpretive signage
- **Re-construction or re-route:** Extensive trail or access road rebuilding or re-routing
- **Herbicide application:** Herbicide application is used to specifically target noxious, non-native plant species that spread rapidly along trail and access road corridors
- Equipment purchase, repair, or rental: Vehicles, helicopter rental, chain saws, brush-cutters, herbicide, fuel, and other ancillary equipment and related equipment maintenance

Kauai Trails and Access Roads / Management Activity	RTP CATEGORY FMIS Code	Distance
Kuamoo Trail: Grading, Brushing, tree removal, water diversion, sign installation, herbicide application	Diversified Y054	2.0 mi.
Nualolo Cliff Trail: Brushing, tree removal, water diversion, sing installation and maintenance, re-construction, helicopter support, herbicide application, trail shelter	Non-motorized Y053	2.1mi.

<b>Kuamoo Trail:</b> Grading, Brushing, tree removal, water diversion, sign installation, herbicide application	Diversified Y054	2.0 mi.
repair.		
<b>Awaawapuhi Trail:</b> Brushing, tree removal, water diversion, sign installation, helicopter r support, herbicide application, trailhead parking area improvements, plant identification sign replacement.	Non-motorized Y053	3.1mi.
<b>Nualolo Trail:</b> Brushing, tree removal, water diversion, sign installation, helicopter support, herbicide application, trailhead parking improvements.	Diversified Y054	3.8 mi.
<b>Pihea Trail:</b> Brushing, tree removal, water diversion, boardwalk repair, sign installation, helicopter support, trail shelter maintenance, bridge maintenance, and composting toile maintenance.	Non-motorized Y053	3.8 mi.
<b>Alakai Swamp Trail:</b> Brushing, tree removal, water diversion, boardwalk repair, sign maintenance, helicopter support.	Non-motorized Y053	3.5 mi.
<b>Kawaikoi Stream Trail:</b> Brushing, tree removal, water diversion, boardwalk repair, herbicide application, trail shelter repair.	Non-motorized Y053	1.8 mi.
Koaie Canyon Trail: Brushing, tree removal, water diversion, helicopter support, herbicide application, trail shelter repairs, composting toilet maintenance	Non-motorized Y053	3.0 mi.
<b>Iliau Nature Loop:</b> Brushing, tree removal, water diversion, sign installation, trail shelter repair, herbicide application.	Non-motorized Y053	.3 mi.
<b>Kukui Trail:</b> Brushing, tree removal, water diversion, sign installation, re-construction, trail shelter maintenance, herbicide application, composting toilet maintenance.	Diversified Y054	2.5 mi.
<b>Kuilau Trail:</b> grading, brushing, tree removal, water diversion, hardscaping, sign installation, trail shelter repair, herbicide application, bridge and gate repair.	Non-motorized Y053	2.1 mi.
<b>Moalepe Trail:</b> Reconstruction and grading, brushing, tree removal, water diversion, hardscaping, sign installation, gate maintenance, and herbicide application.	Diversified Y054	2.5 mi.
Okolehau Trail: Brushing, tree removal, sign maintenance, herbicide application.	Non-motorized Y053	2.3 mi.
<b>Nounou East and West Trails:</b> Brushing, tree removal, water diversion, sign installation, gate maintenance, fence maintenance.	Non-motorized Y053	3.5 mi.
Kohua Ridge Trail: Brushing, tree removal, water diversion, sign installation	Non-motorized Y053	2.5 mi.
Milolii Vista Trail: Brushing, tree removal, water diversion, sign installation	Diversified Y054	2.5 mi.
Mohihi-Waialae Trail: Brushing, tree removal, water diversion, sign installation	Diversified Y054	2.5 mi.
Waimea Canyon Trail: Brushing, tree removal, water diversion, sign installation	Diversified Y054	2.5 mi.
		Trail Total <b>55.5 mi</b> .
Wailua Forest Management Road: Grading, brushing, tree removal, water diversion, hardscaping, sign maintenance, excavator rentals, culvert repair, bridge maintenance	Diversified Y054 Y055 Y057	3.0 mi.
Kauhao Ridge Access Road: Grading, brushing, tree removal, water diversion, hardscaping, sign maintenance, herbicide application, gate maintenance	Diversified Y054 Y055 Y057	5.0 mi.

Kuamoo Trail: Grading, Brushing, tree removal, water diversion, sign installation, herbicide application	Diversified Y054	2.0 mi.
Mohihi-Camp 10 Access Road: Grading, brushing, tree removal, water diversion, hardscaping, sign maintenance, herbicide application, gate maintenance	Diversified Y054 Y055 Y057	6.1 mi.
Polihale Ridge Access Road: Grading, brushing, tree removal, water diversion, hardscaping, sign maintenance, herbicide application, gate maintenance	Diversified Y054 Y055 Y057	5.3 mi.
Makaha Arboretum Access Road: Grading, brushing, tree removal, water diversion, hardscaping, sign maintenance, herbicide application, gate maintenance	Diversified Y054 Y055 Y057	2.5 mi.
Pine Forest Access Road: Grading, brushing, tree removal, water diversion, hardscaping, sign maintenance herbicide application, gate maintenance	Diversified Y054 Y055 Y057	1.3 mi.
Milolii Ridge Access Road: Grading, brushing, tree removal, water diversion, hardscaping, sign maintenance, herbicide application, gate maintenance	Diversified Y054 Y055 Y057	3.8 mi.
		Access Road Total: 31.3 mi.

Hawaii Trail and Access Roads / Management Activity	RTP Classification FMIS Code	Distance
Ala Kahakai Trail: Grading, re-construction, brushing, water diversion, sign installation and maintenance, tree branch removal, helicopter support	Non-motorized YO53	7.7 mi.
<b>Keauhou-Napoopoo Trail</b> : (MOA with private landowner for stewardship) sign installation and maintenance.	Non-motorized YO53	4.0 mi.
<b>Puna Trail</b> : Grading, re-construction brushing, water diversion, sign installation and maintenance, tree branch removal.	Non-motorized YO53	2.5 mi.
<b>Puu Huluhulu Trail:</b> Grading, re-construction, brushing, water diversion, sign installation and maintenance	Non-motorized YO53	0.6 mi.
Puu Oo Horse Trail: Grading, re-construction, brushing, sign installation and maintenance, helicopter support.	Diversified YO54	7.4 mi.
Ainapo Trail: Brushing, tree branch removal, sign installation and maintenance, helicopter support.	Diversified YO54	20.4 mi.
Onomea Trails: Grading, re-construction, brushing, water diversion, sign installation and maintenance	Non-motorized YO53	1.2 mi.
Muliwai Trail: Grading, re-construction, brushing, water diversion, sign installation and maintenance, helicopter support.	Diversified YO54	18.0 mi.
<b>Humuula Trail:</b> Grading, re-construction brushing, water diversion, sign installation and maintenance, tree branch removal	Non-motorized YO53	10.5 mi.
<b>Doctor=s Pit Trail:</b> Grading, re-construction brushing, water diversion, sign installation and maintenance, tree branch removal.	Non-motorized YO53	0.4 mi.
Kaumana Trail: Brushing, tree branch removal, sign installation and maintenance.	Non-motorized YO53	3.0 mi.
Puakea Bay Trail: Brushing, re-construction, water diversion, sign installation, helicopter	Diversified YO54	0.5 mi.

support.		
<b>Pololu Trail:</b> Grading, re-construction, brushing, water diversion, sign installation and maintenance.	Diversified YO54	1.0 mi.
		Trail total 77.2 mi.
Mauna Loa Observatory Access Road: Grading, water diversion, brushing, sign installation and maintenance	Diversified YO55-YO57	35.0 mi.
Puu Laau Access Road: Grading, water diversion, sign installation and maintenance.	Diversified YO55-YO57	8.4 mi.
Mauna Kea Access Road: Grading, water diversion, sign installation and maintenance.	Diversified YO55-YO57	32.0 mi.
Ainapo Access Road Grading, water diversion, sign installation and maintenance.	Diversified YO55-YO57	16.0 mi.
		Access road total: 91.4 mi.
Upper Waiakea ATV/Dirtbike Park: Bulldozing, Brushing, Tree removal, Water diversion, Hardscaping parking lot and trails, Sign installation & maintenance, Reconstruction & re-route, Equipment purchase & Rental, Rubbish disposal, Portable toilet rental, Composting toilet acquisition, Picnic site development	Motorized YO56	2,000 acres 11 mi.

Oahu Trail and Access Roads / Management Activity	Classification FMIS Code	Distance
Kuaokala Trail: Grading, brushing, tree removal, water diversion, sign maintenance	Diversified Y054	2.5 mi.
<b>Kealia Trail:</b> Grading, brushing, tree removal, water diversion, sign maintenance, herbicide application	Diversified Y054	2.3 mi.
Kaunala Trail: Grading, brushing, tree removal, water diversion, sign maintenance	Diversified Y054	2.5 mi.
<b>Hauula-Maakua Trails:</b> Grading, brushing, tree removal, water diversion, sign maintenance	Diversified Y054	5.0 mi.
<b>Poamoho Trail:</b> Grading, brushing, tree removal, water diversion, sign maintenance, helicopter support	Non-motorized Y053	3.0 mi.
<b>Schofield-Waikane Trail:</b> Grading, brushing, tree removal, water diversion, sign maintenance, helicopter support	Non-motorized Y053	3.5 mi.
<b>Manana Trail:</b> Grading, brushing, tree removal, water diversion, sign maintenance, herbicide application helicopter support	Diversified Y054	6.0 mi.
<b>Waimano Trails:</b> Grading, brushing, tree removal, water diversion, sign maintenance, helicopter support	Diversified Y054	7.2 mi.
Honolulu Mauka Trail System: Grading, brushing, tree removal, water diversion, hardscaping, boardwalk maintenance and installation, sign maintenance, herbicide application	Non-motorized Y053	15.53 mi.
Maunawili Trails: (Demonstration, Falls and Ditch trails) Grading, brushing, tree removal, water diversion, sign maintenance, herbicide application, helicopter support	Non-motorized Y053	15.00 mi.
<b>Wiliwilinui Trail:</b> Grading, brushing, tree removal, water diversion, sign maintenance, helicopter support	Diversified Y054	3.00 mi.

RTP

Hawaiiloa Ridge Trail: Grading, brushing, tree removal, water diversion, sign maintenance, helicopter support	Diversified Y054	3.5 mi.
<b>Kuliouou Valley and Ridge Trails:</b> Grading, brushing, tree removal, water diversion, sign maintenance, helicopter support	Diversified Y054	3.00 mi.
Kaiwa Ridge Trail: Grading, brushing, hardscaping, sign installation	Non-motorized Y053	1.0 mi.
		Trail Total: 73.03 mi.
<b>Kuaokala &amp; Mokuleia Access Roads:</b> Grading, brushing, tree removal, water diversion, sign maintenance	Diversified Y054-Y055	10.8 mi.
<b>Poamoho Access Road:</b> Grading, brushing, tree removal, hardscaping, water diversion, sign maintenance	Diversified, Y054-Y055	2.5 mi.
Kealia Access Road: Grading, brushing, tree removal, water diversion, sign maintenance	Diversified Y054-Y055	1.5 mi.
		Access road total: 14.8 mi.
Kahuku OHV Park (Hawaii Motorsports Association)		
Access road grading, track grading and re-construction, trail grading and re-construction, rubbish disposal, fencing materials, chemi-toi rental, equipment rental and acquisition	Motorized Y056	500 acres 30.5 mi.

RTP

Maui Trails and Access Roads / Management Activity	Classification FMIS Code	Distance
Hoapili Trail: Brushing, tree removal, sign installation	Non-motorized Y053	5.5 mi.
Skyline Trail: Brushing, tree removal, equipment rental	Diversified Y054	6.8 mi.
Waihee Ridge Trail: Grading, brushing, water diversion, boardwalk installation, herbicide application	Non-motorized Y053	2.5 mi.
Lahaina Pali Trail: Grading, water diversion, sign installation, herbicide and weed wrenching	Diversified Y054	5.5 mi.
Boundary Trail: Grading, brushing, water diversion, tree removal herbicide	Diversified Y054	4.4 mi.
Plum Trail: Grading, brushing, water diversion, tree removal	Diversified Y054	1.7 mi.
Tie Trail: Grading, Brushing, water diversion, tree removal	Diversified Y054	0.5 mi.
Polipoli Trail: Grading, brushing, water diversion, sign installation	Diversified Y054	0.6 mi.
Ke Alaloa O Maui: Brushing, tree removal, sign installation	Non-motorized Y053	3.0 mi.
Waiakoa trail: Grading, Brushing, water diversion, tree removal	Diversified Y054	7.0 mi.

Waiakoa Loop: Grading, Brushing, water diversion, tree removal	Diversified Y054	3.0 mi.
Waihou Spring Trail: Grading, Brushing, water diversion, tree removal	Diversified Y054	1.0 mi.
Waiohuli Trail: Grading, Brushing, water diversion, tree removal	Diversified Y054	1.4 mi.
Redwood Trail: Grading, Brushing, water diversion, tree removal	Diversified Y054	1.7 mi.
Haleakala Ridge Trail: Grading, Brushing, water diversion, tree removal	Diversified Y054	1.6 mi.
Mamane Trail: Grading, Brushing, water diversion, tree removal	Diversified Y054	1.8 mi.
Waikamoi Ridge Trail: Brushing, hardscaping, boardwalk installation, tree removal, herbicide application	Non-motorized Y053	0.8 mi.
Keanae Arboretum: Brushing, herbicide application, tree removal, sign maintenance	Non-motorized Y053	0.6 mi.
		Trail Total: 49.4
Waipoli Access Road: Grading, brushing, water diversion	Diversified Y054 Y055	Access road total: 8.1

Molokai Trail and Access / Management Activity	RTP Classification FMIS Code	Distance
Maunahui-Makakupaia Access Road: Grading, brushing, water diversion, tree removal	Diversified Y054 Y055	9.8 mi
Kahanui Access Roads: Brushing, tree removal, water diversion	Diversified Y054 Y055	3.3 mi.
		Access road total: 17.3 mi.

Lanai Trails and Access Roads / Management Activity	RTP Classification FMIS Code	Distance
Hulopoe-Huawai Fisherman Trail: Grading, brushing, water diversion	Non-motorized	Trail total:
	Y053	2.0 mi.
Federation Camp Access Road: Grading	Diversified	1.24 mi.
redetation Camp Access Road. Grading	Y055 Y057	
Mahana Access Road: Grading	Diversified	1.52 mi.
	Y055 Y057	
Kahua Access Road: Grading	Diversified	5.41 mi.
Kahua Access Road: Grading	Y055 Y057	5.41 mi.

Kuamoo Access Road: Grading	Diversified	.94 mi.
	Y055 Y057 Diversified	
Lapaiki Access Road: Grading	Y055 Y057	3.8 mi.
Awalua Access Road: Grading	Diversified Y055 Y057	3.66 mi.
Kaena Access Road: Grading	Diversified Y055 Y057	3.75 mi.
#7 Access Road: Grading	Diversified Y055 Y057	1.6 mi.
#5 Access Road: Grading	Diversified Y055 Y057	1.78 mi.
#3 Access Road: Grading	Diversified Y055 Y057	1.06 mi.
Honopu Access Road: Grading	Diversified Y055 Y057	3.22 mi.
Guard Access Road: Grading	Diversified Y055 Y057	38.2 mi.
Nanahoa Access Road: Grading	Diversified Y055 Y057	1.05 mi.
Paliamono Access Road: Grading	Diversified Y055 Y057	.41 mi.
Naupaka Access Road: Grading	Diversified Y055 Y057	.97 mi.
Keone Access Road: Grading	Diversified Y055 Y057	1.74 mi.
#57 Access Road: Grading	Diversified Y055 Y057	3.42 mi.
Kahue Access Road: Grading	Diversified Y055 Y057	4.15 mi. <b>77.92</b> total

# 4. ANCIENT AND HISTORIC TRAILS

(Ala Loa: Long trail, Ala Aupuni: Government trail)

# **Inventorying, Abstracting and Evaluation**

Section 198D-3, HRS, requires that an inventory of trails and accesses shall be established, maintained and amended as required. Abstracts of ancient and historic trails, non-vehicular old government roads, and old cart roads, constitute virtually all of the inventory work currently being conducted and are specifically associated with trails and non-vehicular roads that are subject to the Highways Act of 1892. Section 264-1, HRS, subsumed the Highways Act of 1892 and contains the following provision:

"(b) All trails, and other non-vehicular rights-of-way in the State declared to be public rights-of-way by the Highways Act of 1892, or opened, laid out, or built by the government or otherwise created or vested as non-vehicular rights-of-way at any time thereafter, or in the future, are declared to be public trails. A public trail is under the jurisdiction of the State Board of Land and Natural Resources (BLNR) unless it was created by or dedicated to a particular county, in which case it shall be under the jurisdiction of that county."

The Abstract Section of NAH provides technical support in locating and determining governmental jurisdiction to historic roads and ancient trails throughout the State. Abstracts of title are accomplished through historical research of documents, maps and other media together and then are then subject to Section 264-1 HRS. Conducting abstracts are dictated by development actions that trigger regulation such as Conservation District Use applications or county subdivision applications. Discussion and evaluation among pertinent island AC and NAH staff results in specific requests for abstract information, and plays an integral role in determining current and future options for developing and restoring trail and non-vehicular access roads.

NAH has identified several differing historic trail scenarios and potential responses to address the State's interest in the application of Chapter 264-1 HRS. These scenarios are further affected by Chapters 6E, 171, 264, and198D, HRS. Historic trail scenarios require coordination and agreement on procedure among DOFAW, DLNR's Land and the Historic Preservation Division and affected private landowners - since these features traverse private property. The determination of title is subject to litigation if the affected landowner disputes the finds of the Abstractor. Ultimately, litigation is the only definitive method to determine ownership if there is a dispute.

The NAH Abstract Section also assists the Department of the Attorney General (AG) in identifying possible interest the State may claim in roads and/or trails situate within the boundaries of lands that are the subject of quiet title actions (QTA) or Land Court applications. If ownership is confirmed, public access via these road or trail features bounded by private land is documented. Affirmation of ownership provides future options for recreational development and/or access. In 2005, the Abstractor performed research on 27 QTA request from the AG.

The following table provides a statewide breakdown of NAH abstract of title requests that have been initiated since 1992. Hawaii has the most significant need for abstract data due to the abundance of historic trail features and development trends.

ABSTRACT LOCATION	FY04-05	TO DATE	STATE OWNED	PUBLIC ACCESS	OTHER OWNERSHIP
Kauai	3	23	8	9	6
Oahu	2	18	5	4	9
Maui	8	48	21	18	9
Hawaii	19	157	89	17	51
TOTAL	32	246	123	48	75

#### Ala Kahakai National Historic Trail

In 1992, Senator Daniel Akaka introduced legislation that authorized the National Park Service (NPS) to conduct a feasibility study to determine if a conceptual trail (Ala

Kahakai) comprised of ancient and historic trails (ala loa) along the shoreline of the Big Island would qualify to be included in the National Historic Trail System NPS determined it did, and Congress subsequently approved the designation. In November of 2000, President Bill Clinton approved the designation. A percentage of the final alignment will be based on the NAH abstracts concluding that specific sections of ala loa are owned by the State.

Subsequently, NPS has conducted community meetings to collect public input on draft Management Prescriptions and Alternative (DMPA) related to implementing the Ala Kahakai. However, throughout this process, there has been considerable ambiguity as to the role of NPS related to the State and County in the long-term management of Ala Kahakai. NAH comments to the DMPA and during numerous discussions with NPS staff have consistently indicated the need for a written agreement between NPS, DLNR and the County of Hawaii on clarifying the roles of the respective agencies relating to jurisdiction and tasks related to the establishment and management of the Ala Kahakai.

#### **Draft Memorandum of Agreement**

In March, NAH created a draft Memorandum of Agreement (MOA) based on the approximate potential alignment of Ala Kahakai, and identified the DLNR Divisions and respective Statutes and Hawaii Administrative Rules that would be triggered by activity along the anticipated alignment. NPS and Hawaii County have reviewed and commented. NPS has now assumed the lead and instituted substantive re-formatting based on federal standards. The result is a document identifying respective jurisdiction and implementation strategies. Additionally, the MOA may be used as a tool to communicate to interested constituencies what the various agencies roles are — which up to this point has been challenging.

The draft MOA is undergoing internal review to ensure that statutory and administrate rule references are correct and that the associated tasking is acceptable. A potential concern is that NPS, based on mainland models for National Historic Trails, will not be the active mangers, but rely on DLNR. DLNR's goal is to insure that NPS will assume management, or insure that sufficient federal funds are allocated to DLNR should management become a shared responsibility.

# 5. COMMERCIAL TRAIL TOUR ACTIVITY (CTTA)

Act 106, SLH 1997, allows for user fees from commercial use of NAH trails and access routes to be deposited into the Special Land and Development Fund. This provision affords the opportunity to defray the costs to NAH in the management, trail maintenance, and regulating and monitoring of the commercial trail tour operations. There is consensus between DLNR and the private sector that it is in the commercial trail tour industry's best interest to protect trails and access roads used by the tour industry through intervening regulation. Regulation via a permit is codified in Chapter 13-130, Hawaii Administrative Rules (HAR), for NAH.

A significant component is the method by which the commercial tour vendors reserve and utilize a limited number of commercial patron slots per trail and access road. This has been accomplished in a manner that meets the needs of the tour industry and minimizes NAH staff time spent in managing the process. A permitting and Internet scheduling method is in place to ensure that commercial activities by multiple vendors do not exceed the daily capacities and/or number of groups established for CTTA trails and roads. The reservation system records the reservation, date, and calculates the fee. Glitches to the website must be responded to immediately, since permitted operators cannot make reservations if the site is down.

The fees have not changed since the CTTA program's inception in 1999 and are assessed per unit and based upon the potential trail impact of the mode of transport:

Hike	Bike & Horse	Motorcycle	4WD (5)	4WD (8)	4WD (12)	4WD (15)
\$5.00	\$7.00	\$10.00	\$25.00	\$50.00	\$75.00	\$100.00

Payments are required after reservations are made, and vendors receive monthly invoices for the total amount of patron slots reserved, less any cancellations due to inclement weather. NAH has determined that inclement weather, such as high precipitation, may reduce public safety and increase trail or access road impact. Therefore, the operators are encouraged, through a waiving or the fee when paying the invoice, not to use the feature during inclement weather.

#### Revenue

FY05, net revenue (20 % of the total gross revenue is allocated to the Office of Hawaiian Affairs) from commercial fees was @ \$112, 082. This is a \$71,576 increase from FY04. Staff labor managing and monitoring this activity was 230 hours. Currently, there are 43 authorized commercial trail tour operators permitted by NAH.

CTTA Revenue	FY05	FY04	FY03	FY02	FY01
Kauai	\$34,273	\$11,114	\$33,232	\$36,145	\$27,800
Oahu	\$37,442	\$18,884	\$6,119	\$ 2,154	\$ 3,240
Maui	\$ 1,644	\$336.00	\$640.00	\$ 3,436	\$ 6,116
Hawaii	\$38,723	\$10,172	\$25,752	\$ 4,028	\$ 2,212
Total	\$112,082	\$40,506	\$65,743	\$45,763	\$39,368

# 6. ENVIRONMENTAL RISK MANAGEMENT

Due to heightened concerns related to public safety in mauka recreation areas, NAH has initiated environmental hazard evaluation. The United States Forest Service (USFS) entered into an Interagency Agreement to provide assistance in assessment and management of risk at various NAH and State Park trails. The USFS Risk Assessment Team (RAT) was instrumental in identifying the common statewide dangerous natural conditions that warranted signage, and also developed the initial design that has been further modified by the Act 82 Risk Assessment Working Group. In 2005, NAH contracted the RAT to return to Hawaii to specifically identify the location and placement of signs at trailheads and along trails relating to flashflood, falling rocks, dangerous cliffs, and submerged objects in swimming areas. Based on the findings, categories of signs and the respective locations along trail have been determined. Risk management and

warning sign installation and monitoring will become a basic operating procedure of the NAH Program. (See the Act 82 2006 Report to the Legislature)

# 7. ADVISORY COUNCILS

The NAH Trail and Access Advisory Councils (AC's) meet based upon their respective island's trail and access issues. In FY05, AC's meeting held on each island were as follows: Hawaii - 11, Kauai - 0, Oahu - 6, Maui - 10, Molokai - 6 and Lanai - 6.

The range in meeting frequency indicates the difference among islands that are engaged in more trail development and analysis versus a more static regulatory and management mode. For example, Maui is engaged in trail development due to the lack of public trails. The AC members are useful and engaged in assisting staff with trail development. On the Big Island, staff and the AC are continually responding to ancient and historic trail situations during land development phases. On Oahu, the AC does not meet as frequently based on the Oahu program's basic trail maintenance and regulatory issues. On Kauai, the AC does not meet at all due to a consistent lack of quorum resulting from no issues mauka forest recreational trail issues generating the need for AC involvement at this point in time. There is growing coastal trial and access issues that may require the AC to collaborate with the newly formed Kauai Coastal Access Council.

The agendas and minutes of the meetings are on file at DOFAW Branch offices. Many of the issues and subjects covered by AC's are reflected in the following statewide trail and access projects. The Statewide NAH AC meets at least once a year and is comprised of the chairpersons (or their representatives) of the 6 Island ACs and a representative of the off-road vehicle user group. The Statewide NAH AC meets annually to provide continuity of NAH implementation among the Island ACs and to discuss and resolve issues that affect NAH statewide, such as sharing trail and access issues that are both statewide or island specific, and to discuss administrative and management issues, the RTP grant projects and other budgetary items.

# 8. STATEWIDE NAH PROGRAM & STAFF ACTIVITES

# Kauai Branch

# 1. Volunteer Support:

- Continued the Kauai Adopt-A-Trail Program with the Kauai Sierra Club, Charlie Cobb-Adams and the Kokee Resource Conservation Program totaling over 487 hours of volunteer work.
- Working with the Kauai Boys Scouts to construct a 30' long foot bridge along the Pihea Trail.
- Awarded all individual volunteers with official "Kauai DOFAW Volunteer" T-Shirts.

# 2. Advisory Council Activity:

• Because of the lack of issues and the subsequent lack of a consistent quorum, there were no scheduled meetings in 2005. The Kauai AC members were notified

to input comments to NAH regarding issues via email and regular mail if issues arise.

# 3. Special Events:

 Participated in the 2005 Kauai Weed Tour that was hosted by the University of Hawaii Tropical Agriculture Program. The Kauai NAH staff coordinated trail tours to participants to discuss invasive weed problems in Kauai's Trails and Roadways.

# 4. NAH Support to DOFAW Branch Programs and Issues:

- Staff continued required first aid, CPR and fire fighting training.
- Staff participated in DLNR firefighting efforts on State forest reserve lands.
- Participated in NAH Core Group meeting.
- Responded to numerous public inquires regarding hiking in Hawaii.
- Assisted Kauai Natural Areas Reserve System with maintenance of the Kokee Field Station and Kalalau Rim Project.
- Kauai NAH Coordinated the 2005 Youth Conservation Corp (YCC), directly
  working with Pono Pacific to schedule work projects for fifteen youths for Kauai
  DOFAW projects. YCC maintained the Kalalau Rim Out-planting site, did trail
  improvements on Kukui and Kuamoo Trail and worked with the Wildlife section
  on wildlife restorations and maintained cages for endangered seabirds.
- Staff assisted with Smokey Bear to spread his message about Forest Fire Prevention at the Kauai County Farm Fair.
- Staff assisted with construction of fenced enclosures of native endangered plants under the guidance of NARS.
- NAH crew assisted the Kauai Invasive Species Program with eradicating Coqui Frogs, Miconia and Austrialian Tree Fern from Kauai Forest Reserves and private lands.
- Assisted Kauai Division of State Parks with road repairs along the Camp-10 Road, Kokee.
- Assisted Kauai Division of Conservation and Resource Enforcement with repairs to the Kokee Cabin.

# 5. Trail and Access Management Issues:

- Manage the CTTA Permit process. Commercial tail tours continues to be very active on Kauai with 9 hiking tours, 2 four-wheel drive tours, 3 equestrian tours and a newly formed motorcycle tour. NAH continues to monitor trail usage on an annual basis.
- Involved with the Kauai County in the development of the Kealia Bike/Pedestrian Trail
- Coordinating with DLNR's Engineering Division to draft plans to mitigate and schedule work for the reconstruction of public facilities to address the Americans with Disability Act (ADA).
- Worked with the U.S. Forest Service Risk Management Team on Nounou, Awaawapuhi and Nualolo Trails as well as the Keahua Arboretum in identifying trail hazards.

• Meet with the newly formed County of Kauai Public Access Committee regarding access along the shoreline.

# 6. Trail and Access Maintenance, Restoration, or Development:

- Completed trash removal from Waimea Canyon and Waialae Camp sites.
- Maintained routine maintenance of 108 miles of trails, 72 miles of roads, 34 trail shelters and benches, 45 field gates, 11 composting toilets, 66 acres of arboreta. Painted all of the existing picnic shelters and tables.
- Installation and repairs to trail and cautionary signs.
- Installed over 6 tons of gravel for trail thread improvements to the Moalepe Trail.
- Installed over 200 tons of gravel and reconstructed portions of the Wailua Forest Management Road.
- Repaired and installed 100 tons of gravel on the Rego Road.
- Repaired the Right-of-way fence at Kuamoo Trail.

#### Hawaii Branch

#### 1. Volunteer Support:

• Supervised approximately 3,000 hours of volunteer trail service projects; which included construction, maintenance, location, reconstruction, monitoring, mapping and reconnaissance.

# 2. AC Activity:

- A total of eleven public meetings were held throughout the Big Island.
- Worked with 17 landowners and developers and participated on numerous field trips relating to trail identification, realignment, protection, construction, and reconstruction advise.
- Worked on identifying the location of two ancient trails in the Kohanaiki Homesteads Development in Kona. Work still pending discussions with State Historic Preservation Division and residents for the final recommended location.
- Working with Mauna Kea Properties to resolve day use issues and installing parking lots for the public in South Kohala.
- Revised and added more guidelines for the treatment of Historic Hawaiian Trails.
- Assisting developers with the planning of the Mauka Trail Project extending from Hualalai to Volcano National Park.
- Filled two additional council member seats with Mr. Dale Fergerstrom and Mr. John Replogle, who have extensive background working with public use issues.
- Assisted the YWCA, who received a grant to restore the Old Volcano Trail in Hilo.
- Completed reconnaissance and recording of ancient coastal trails in South Kona, specifically from Papa Bay to Okoe Bay.
- Worked on resolving use and ownership of the Holualoa Trail in Kona

#### 3. Special Events:

• The annual Mauna Kea 200 Motorcycle Event sponsored by the Rock Island Riders Association took place in May with a large turn out of riders.

• Staff attended an Off-Highway Vehicle Use Conference in Ontario, California.

# 4. NAH Support to DOFAW Branch Programs and Issues:

- Staff assisted with fire suppression activities in Waikoloa and Mahukona, South Kohala.
- Installing a composting bathroom facility at the Puu Oo Saddle House.
- Staff attended fire fighting skills refresher courses.
- Assisted with recreational use input to determine a transfer of the Haukalua lands, in South Kona, to forest reserve status.

# 5. Trail and Access Management Issues:

- Administered 10 commercial tour companies
- Staff responded to an motorized vehicle trespass over a possible ancient trail along the Mudlane Road in Kamuela.
- Continuing to resolve littering problems in remote Waimanu Valley Campground.
- In the process of reviewing a memorandum of agreement with the National Park Service for the management of the Ala Kahakai National Historic Trail.
- Working with Ke Kailani Development, in South Kohala, to relocate a coastal trail susceptible to erosive action from high surf.

# 6. Trail and Access Maintenance, Restoration, or Development:

- Installing new signs along trails and replacing old and vandalized signs.
- Worked with DOFAW Field Crews and volunteers to develop, maintain and reconstruct trails, which include Muliwai, Ala Kahakai, Pololu, Onomea, Puu Huluhulu, Kaumana, and Puu Oo, Ainapo, and the Kiholo-Huehue Trails as well as maintenance of campsites, campgrounds, composting toilet units, and trash pickup and removal.
- Constructing a nature trail in Kipuka 21, a native bird sanctuary along Saddle Road, using contract labor.
- Completed restoration of an ancient coastal trail through numerous archeological sites within the Kamalani Development in South Kohala.
- Constructed steps on the Onomea Trail in Hilo.
- Assisted with the development of a trail and picnic facilities within the Puu Waawaa Management Area.
- Added more riding trails in the Upper Waiakea ATV/Dirt Bike Park.

# Maui Branch (Includes Lanai and Molokai)

# 1. Volunteer Support:

- Coordinated and supervised trail service work of 102 individual volunteers for a total of 2,642 hours on various trails and access projects.
- Awarded outstanding volunteers with plaques and an appreciation party for all volunteers.

# 2. AC Activity:

• Maintained connection to council and filled all vacancies.

• Participated in 10 Maui AC meetings.

# 3. Special Events:

- Coordinated and solicited the participation of the National Off Highway Vehicle Conservation Council and National Park Services Rivers, Trails and Conservation Assistance program to conduct a 3-day workshop on Maui for OHV use. The Workshop will be conducted in October 10 13, 2005.
- Conducted Earth Day Celebration and Blessing for the Ohai Loop Trail opening and National Trails Day celebration, hike and blessing for the Kahakapao Loop Trail.

# 4. NAH Support to DOFAW Branch Programs and Issues:

- Staff continued required, first aid, CPR and firefighting training.
- Staff participated in pCard training.
- Participated in Keonioio public meetings
- Commented on Special Management Area permitting process for County request.
- Participated in United State Forest Service environmental risk identification along trail process.
- Continued efforts in locating sections of the King's Trail in Kipahulu and Kapiliula
- Staff participated in DLNR firefighting efforts on State forest reserve lands.
- Participated in NAH Core Group meeting.
- Responded to numerous public inquires regarding hiking in Hawaii.
- Participated in DFOAW Family Meeting.
- Assisted and advised DOFAW, NARS, Division of State Parks, Land Division, Maui County and federal agencies in trail related issues and logistical support when requested.
- Organized and participated in DOFAW's use of Americore and YCC participants.

# 5. Trail and Access Management Issues:

- Continued monitoring and management of CTTA Permit process.
- Continued monitoring and managing with the assistance of DOCARE, a personal guide identification number for commercial tour operators. This is for safety precautions and to insure only legal operators are utilizing NAH trails.
- Continued monitoring trail bed stability, non-native plant invasion and the condition of archaeological resources on the Mamane, Waihee Ridge, and Old Lahaina Pali Trails, utilizing a photo-point management system.
- Continued mitigation efforts of the Kahakapao Loop Trail by re-routing two 4-wheel drive roads in the Makawao Forest Reserve.
- Continued to investigate the possibility of developing the Old Haleakala Bridal Trail (Kalialinui).
- Continued working with Maui Land and Pineapple Co. to complete the necessary improvements to the ADA parking at the Mokuleia Stairway.

#### 6. Trail and Access Maintenance, Restoration, or Development:

- Maintained a fence exclosure for <u>Sesbania tomentosa</u>, Ohai, with the help of DOFAW, the Maui AC, the Native Plant Society and NAH volunteers.
- Repaired trails in the Waianapanapa State Park (Ke Ala Loa O Maui, King's Trail)
- Continued propagation effort of native species within the Ohai fence exclosure.
- Continued maintenance of 150 feet of stepped walkway with handrails and scenic lookout for the mobility impaired at Mokuleia Bay in Napili for public access to the shoreline
- Worked with DOFAW field crews and volunteers to maintain in the Kula, West Maui, Koolau, and Waihou Springs Forest Reserves, and on the Old Lahaina Pali Trail, a total of 42 miles of recreational trails.
- Continued planning and implementing the full development of the Waikamoi Ridge Trail to accommodate 2-lane foot traffic with an imported hardened surface and boardwalk with the use of volunteer labor.
- Continued planning and implementing a recycled rubber matting design to be installed on the Waiakoa Loop Trail and the Mamane Trail to maintain tread stability damaged by bicycle use with the use of volunteer labor.
- Maintained plant identification signs in Keanae Arboretum Walk.
- Continue maintenance efforts on the Waipoli Road in the Kula Forest Reserve.

#### Molokai

# 1. AC Activities:

- Maintained connection to the Molokai AC and tried to fill vacant seats.
- Participated in 6 Molokai AC meetings.
- AC members participated in Molokai Earth Day celebration.

#### **Special Events:**

• Conducted hiking event for National Trails Day in conjunction with the Molokai Nature Conservancy.

#### 4. NAH Support to DOFAW Branch Programs and Issues:

- Continued re-negotiations with the Department of Hawaiian Home Lands for the license agreement of the Maunahui/Makakupaia Road.
- Continued re-negotiations with Molokai Ranch, Ltd. for the Memorandum of Agreement of the Maunahui Road.

#### 5. Trail and Access Management Issues:

- Continued researching possible areas for expansion of NAH trail inventory.
- Assisted with the ADA barrier removal contract for the Waikolu Lookout and Campsite

## 6. Trail and Access Maintenance, Restoration, or Development:

• Continued improvements to the Waikolu Lookout and Campsite by reconstruction of overlook facilities, clearing rubble and debris from the campsite area, and construction of a fence utilizing recycled materials. A covered pavilion, rest room facilities and picnic tables are currently being replaced

#### Lanai

# 1. Volunteer Support:

• 14 volunteers worked 56 hours on the Fisherman's Trail

# 2. AC Activity:

- Maintained connection to the Lanai AC.
- Participated in 6 Lanai AC meetings.

#### 3. Special Events:

• Conducted a National Trails Day Event

# 4. NAH Support to DOFAW Branch Programs and Issues:

• Supported the maintenance of hunter access roads via RTP funds

#### 5. Trail and Access Management Issues:

• Continued negotiations with the Lanai Company to enforce the Memorandum of Agreement for the Lanai Fisherman's Trail.

# 6. Trail and Access Maintenance, Restoration, or Development:

- Maintained Lanai Fisherman's Trail.
- Monitored and visited historic trails and ancillary sites.
- Applied RTP funds to access road maintenance

#### Oahu Branch

#### 1. Volunteer Support:

Volunteer Support: Coordinated and supervised 407 volunteers, totaling 2,291 hours of volunteer service on various trails and access improvement projects.
 Awarded outstanding volunteers with shirts, mugs and hats.

#### 2. Trail and Access Advisory Council Activity:

• The AC conducted 6 meetings.

# 3. Major Accomplishments and Special Events:

- Summer interns and Youth Conservation Corps provided us with personnel to get some major trail work done. The YCC group spent five days grubbing about 2 miles of Manoa Cliffs and Waimano Trails, while the interns assisted in clearing some large washouts. Along with our interns, we had three summer volunteers who worked with us most of the summer.
- Oahu Community Corrections Center Support: In this last year the Oahu program has implemented a new 4-man inmate work crew to assist with day-to-day trail maintenance activities. The new program has greatly increased the accomplishment of on the ground maintenance objectives. The inmate crew is most instrumental in maintaining the trail clearing schedule and cutting recycled plastic for cribbing and staircases; moving gravel; repair and maintenance on tools, equipment and vehicles; and various other tasks to support volunteers. This support provided staff more time for planning and administering volunteer service trips and special trail restoration projects.
- Provided support for Governor's "tree planting" at the Makiki offices of the Hawaii Nature Center.
- Conducted CO2 herbicide sprayer training with big Island staff

# 4. NAH Support to DOFAW Branch Programs and Issues:

- Assisted NARS Program clearing fence line
- Constructed fence to secure upper baseyard parking area

# 5. Trail and Access Administration:

- Hired 4 interns for summer trail maintenance and projects
- Coordinated 100 ton gravel delivery at Manoa Falls trail parking lot
- Established OCCC inmate work crew
- Filled Permanent Trail Technician position
- Hired new PCSU Trail Technician Assistant
- Established 4-wheel drive member on Trail and access advisory council
- Implemented formal request to FEMA for monies to repair flood damage caused by the October 31, 2005 flood on the Manoa Falls trail.
- Submitted paperwork for General Labor position.
- Continued responding to high amount of public inquiries via phone and e-mail regarding hiking information and/or access issues.
- Continued contracting services for the clearing on the Maunawili trail system twice in one year.
- Continued administering eleven Commercial Trail Tour Activity permits.
- Authorized 15 film permits for filming at various state forest locations (This included permits for the production "LOST").
- Continued administering Trail and Access Advisory council. Council met 6 times this year.

# 6. Trail and Access Maintenance, Restoration, or Development:

- Reconstructed old trail on Mokulua Island with Fourth Graders from Le Jardin Academy
- Reconstruction of cable restriction barriers at Manoa Falls viewing area; installation of signs in parking area: "Warning Falling Branch Area"

- Reroute Kealia Trail around fallen boulders
- Cleared area off Kanealole Trail for water catchment tank
- Start clearing Makiki Arboretum trail
- Continue major improvements and gravel on Manoa Falls Trail
- Inspection of Maunawili Trail with Pono Pacific
- Continued maintenance of 42 trails and 4-wheel drive access roads, at approximately 88 total miles. Finished maintenance on entire trail system except for Poamoho and Scholfield Waikane proceeding with finishing a second round of maintenance on the Oahu NAH trail system.
- Maintained approximately 252 trail signs
- Finalized and installed interpretive Watershed Awareness Initiative signage along the trails that make up the Makiki Valley watershed. Sign were provided through a grant for 40K from the EPA for signs and trail materials.